

Claims

1. A system (1) for metering and delivering a liquid medium, in particular for enteral nutrition in medical applications, including a storage container (3) having a certain volumetric capacity and a supply device (4) and a discharge device (5) for the medium, whereby the supply and discharge of the medium into and out of the storage container (3) is effected by the force of gravity, characterized by:

a detecting device (6, 7) for determining at least a lower and at least an upper filling level (8, 9) of the medium in the storage container (3) and for outputting appropriate detection signals, and controllable actuating means (10,11) for closing or opening the supply device (4) or the discharge device (5), respectively, said detection signals from the detecting device (6, 7) are supplied to a control unit ST for supplying setting signals to the controllable actuating organs (10,11) according to a given program sequence in dependence on the detection signals.

2. The system according to claim 1, characterized in that the detecting device comprises at least one pair of diode measuring units (6,7) spaced from each other in the direction of the gravitational force in correspondence with the upper and lower filling level.

3. The system according to claim 2, characterized in that the diode measuring device (6) associated with the upper filling level is arranged in such a manner as to prevent scanning of the inflowing medium stream.

4. The system according to any of the claims 1 to 3, characterized in that each controllable actuating organ (10,11) is movable into the closed or open position by a solenoid or a stepping motor.

5. The system according to any of the claims 1 to 4, characterized in that detecting means are provided in order to detect the position of the controllable actuating organs (10,11).
6. The system according to any of the claims 1 to 5, characterized in that the storage container (3) is provided with a ventilating device (17).
7. The system according to any of the preceding claims, characterized in that the control unit ST is integrated into the system.
8. The system according to any of the claims 1 to 6, characterized in that the detection signals output from the detecting device (6, 7) and the setting signals for the controllable actuating organs (10,11) are applicable to an interface for connection to an external control unit.